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OSTROLENK FABER GERB & SOFFEN
1180 AVENUE OF THE AMERICAS
NEW YORK, NY 100368403

EXAMINER	
AMIRI, NAHID	

ART UNIT	PAPER NUMBER
3679	

MAIL DATE	DELIVERY MODE
04/12/2011	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/500,583	WEBJORN, JAN	
	Examiner	Art Unit	
	NAHID AMIRI	3679	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *03* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on *03 March 2011*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2,5-8 and 10-18* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,5-8,10-12 and 14-18* is/are rejected.

7)☒ Claim(s) *13* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed 03/03/2011 in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 03/03/2011 has been entered. The application is not in condition for allowance in view of the rejection set forth below. Claims 3, 4 and 9 are canceled. Claims 1, 2, 5-8 and 10-18 are pending.

Claim Objections

Claim 1 is objected to because of the following informalities:

Claim 1, line 9, "face the" should be changed to --a face of--.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

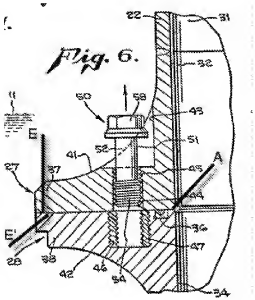
> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 11, 12, and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent No. 4,183,562 Watkins et al.

At the outset, it should be noted that claim 1 is drawn solely to a single flanged member and it is this one flanged member for which patentability is to be determined. How this flanged member is intended to interact with some other flanged member in a flanged joint is of little consequence to the patentability of the single flanged member, itself. Should applicant believe that the functional recitations of intended use impart patentably distinguishing structure to the

single flanged member, then he is reminded that he has the burden of proof to show that such is not inherently present in similar prior art flanged members (i.e., similar as claimed).

With respect to claim 1, it should be noted that the claim drawn only to one flanged member. Accordingly, as claimed, Watkins et al. disclose a flanged member (Fig. 6) configured to be included as a first flanged member (37) in a flanged joint in a pressure equipment device, the flanged joint comprising the first flanged member (27) and a corresponding second flanged member (38) with a second flanged end having a second end surface (E', please see Examiner's markup), said first flanged member (37) comprising a first flanged end with a first end surface (E, please see Examiner's markup) which capable of corresponding to the second end surface (E') of the second flanged end of the second flanged member (38), an entirety of the first load transferring surface positioned and configured to face the second end surface (E'); at least a portion of the first load transferring surface in an unstressed condition being concave (constituted by a curved portion of an innermost portion of the first flange 37) in radial direction, such that the at least the portion of the first load transferring surface is curved and defined by a concave curve function, the first end surface (E) comprising a first load transferring surface through which forces are transferred when assembled together with the corresponding second flanged member; in a radial direction; wherein load transferring surface has an outermost abutment point (A) in a cross section of the first flanged member (37), the outermost abutment point (A) configured to abut against the second end surface of the second flanged member (38) when assembled together with said corresponding second flange member (38), the outermost (A) abutment point being the abutment point situated farthest in the radial direction from the central axis of the first flanged member (37), said load transferring surface has an innermost abutment point in a cross section of the first flanged member, the innermost abutment point configured to abut against the second end surface of the second flanged member when assembled together with said corresponding second flange member, the innermost abutment point being the abutment point situated nearest in the radial direction from the central axis of the first flanged member (37); and a boring (44) passing through the first end surface (E) at a radial distance from a central axis of the first flanged member (37) greater than the radial distance from the central axis of the first flanged member (37) to the innermost abutment point, and less than the radial distance from the central axis of the first flanged member to the outermost abutment point.



With respect to claim 11, Watkins et al. disclose a joint (Fig. 6) comprising a first flanged member (37) and a second flanged member (38) adapted for a pressure equipment device, said two first and second flanged members (37, 38) each comprising at least one flanged end having an end surface (E, E') comprising a load transferring surface through which forces are transferred when connecting together said two first and second flanged members (37, 38) in an assembled state, such that in the assembled state an entirety of said each load transferring surface faces the other load transferring surface, wherein, for the first flanged member (37), at least a portion of the end load transferring surface in an unstressed condition is concave in a radial direction, such that the at least the portion of the end load transferring surface is defined by a concave curve function, said load transferring surface is concave in the radial direction over at least an area that is subjected to deformation when the first flanged member is assembled together with said second flanged member, and any first point on the at least the portion of said load transferring surface and any second point of the at least the portion of said load transferring surface directly distal to the first point meeting a plane inclined in the radial direction of said flanged member wherein said load transferring surface has an outermost abutment (A, please see Examiner's markup) point in a cross section of the first flanged member (37), the outermost abutment point configured to abut against the end surface of the second flanged member (E') when assembled together with said corresponding second flange member (38), the outermost

abutment point being the abutment point situated farthest in the radial direction from the central axis of the first flanged member (37), said load transferring surface has an innermost abutment point (B, please see Examiner's markup) in a cross section of the first flanged member (37), the innermost abutment point (B) configured to abut against the end surface of the second flanged member (38) when assembled together with said corresponding second flange member (38), the innermost abutment point (B) being the abutment point situated nearest in the radial direction from the central axis of the first flanged member (37); and a boring (44) passing through the end surface of the first flanged member (37) at a radial distance from a central axis of the first flanged member (37) greater than the radial distance from the central axis of the first flanged member (37) to the innermost abutment point (A), and less than the radial distance from the central axis of the first flanged member to the outermost abutment point.

With respect to claim 12, Watkins et al disclose (Fig. 6A) that the first and second flanged members (37, 38) each have a concave end load transferring surface (defined by an end innermost portion point of the first and second flanges 37, 38).

With respect to claim 16, Watkins et al disclose (Fig. 6A) that the load transferring surfaces of each of the first and second flanged members (37, 38) is configured to directly contact the load transferring surface of the remaining flanged member.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 2, 5-8 , 10, 14, 15, 17, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 2,940,779 Buono.

At the outset, it should be noted that claim 1 is drawn solely to a single flanged member and it is this one flanged member for which patentability is to be determined. How this flanged

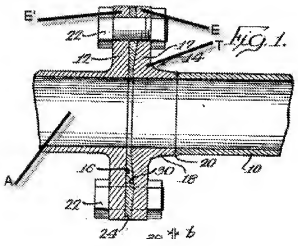
member is intended to interact with some other flanged member in a flanged joint is of little consequence to the patentability of the single flanged member, itself. Should applicant believe that the functional recitations of intended use impart patentably distinguishing structure to the single flanged member, then he is reminded that he has the burden of proof to show that such is not inherently present in similar prior art flanged members (i.e., similar as claimed).

With respect to claims 1 and 2, it should be noted that the claim drawn only to one flanged member. Accordingly, as claimed, Buono discloses a flanged member (Fig. 1) configured to be included as a first flanged member (14) in a flanged joint in a pressure equipment device, the flanged joint comprising the first flanged member (14) and a corresponding second flanged member (12) with a second flanged end having a second end surface (E, please see below Examiner's markup), said first flanged member (14) comprising a first flanged end with a first end surface (E, please see below Examiner's markup) which capable of corresponding to the second end surface of the second flanged end of the second flanged member (12), the first end surface (E) comprising a first load transferring surface through which forces are transferred when assembled together with the corresponding second flanged member; in a radial direction; wherein load transferring surface has an outermost abutment point in a cross section of the first flanged member (14), the outermost abutment point configured to abut against the second end surface of the second flanged member (14) via the gasket (16) when assembled together with said corresponding second flange member (14), an entirety of the first load transferring surface positioned and configured to face the second end surface (E'); the outermost abutment point being the abutment point situated farthest in the radial direction from the central axis of the first flanged member, said load transferring surface has an innermost abutment point in a cross section of the first flanged member (14), the innermost abutment point configured to abut against the second end surface (E') of the second flanged member (12) when assembled together with said corresponding second flange member (12), the innermost abutment point being the abutment point situated nearest in the radial direction from the central axis of the first flanged member (14); and a boring passing through the first end surface (E) at a radial distance from a central axis of the first flanged member (14) greater than the radial distance from the central axis of the first flanged member (14) to the innermost abutment point, and less than the

radial distance from the central axis of the first flanged member (14) to the outermost abutment point.

Buono fails to disclose that at least a portion of the first load transferring surface in an unstressed condition being concave such that the concave of the first end surface is curved; and wherein the first load transferring surface is concave over the entire extension thereof in the radial direction.

It would have been obvious to one of ordinary skill in the art at the time of invention was made to form the concave of the first end surface as a curve instead of forming it from multi-straight lines, since there is no known criticality associated with the concave being curved and it is well-established that changes in shape are obvious expedients. The change in shape of the concave produces no new and unexpected results.



With respect to claim 5, Buono discloses (Figs. 1-3) wherein the first load transferring surface (30) comprises a varyingly concave surface in the radial direction; and wherein the part surface has different radii of curvature.

With respect to claim 6, Buono discloses (Figs. 1-3) that the first flange member (14) further comprising an internal axial through opening, the first load transferring surface (30) having innermost abutment point which capable of abutting against the corresponding second

end surface of the second flanged member (12); and wherein the abutment point being situated nearest in the radial direction, to the opening.

Buono fails to disclose that the concavity of the first load transferring surface extending all the way in to the abutment point. It is notoriously old, well-known and conventional that all materials deform when undergo some external force. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention was made to provide the flange member of Buono with the concavity of the first load transferring surface extending all the way in to the abutment point in order to close the gap between the flange member and other member.

With respect to claim 7, Buono discloses (Figs. 1-3) that the first load transferring surface (30) has the innermost abutment point against the corresponding end surface (16) of the second flanged member (12), which has an internal through axial opening (A), the innermost abutment point being situated farthest in the radial direction, at the opening (A), the concavity of the first end surface (30) extending all the way in to the abutment point.

With respect to claim 8, Buono discloses the claimed invention except for the conceived straight X that connects the proximal point of the first load transferring surface in the radial direction, with distal point thereof, in the radial direction, has a length Lx and the concavity of the first load transferring surface has a maximum depth Dk in relation to a conceived plane surface produced by said line, which depth Dk is of the order of 0.01%-2% of Lx.

It would have been an obvious matter of design choice to construct the concavity of end surface with Applicant's specific dimension since such a modification would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art. In re Rose, 105 USPQ 237 (CCPA 1955).

With respect to claim 10, Buono discloses (Fig. 1) that at least a part of a transition area (T) (see attachment), between the surface of the flange directed away from the end surface (30) and a part of the first flanged member that is substantially parallel to a longitudinal axis of the member, is shaped as a substantially elliptical area.

With respect to claim 14, 15, 17, and 18, Buono discloses (Fig. 1) that the concave surface has more than one radii of curvature; wherein the first load transferring surface is configured to contact directly the second end surface; and wherein at least the portion of the first load transferring surface in the unstressed condition that is concave comprises a majority of the first load transferring surface; and wherein the second flanged member (12) is identical with the first flanged member.(14).

Allowable Subject Matter

Claim 13 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

As to claim 13, lines 1-2, Watkins et al. (US 4,183,562) disclose the claimed flanged member with the exception of the load transferring surface of the first flanged member faces the load transferring surface of the second flanged member before assembly and is inclined in the radial direction outwards to form an angle in radial cross-section, the angle being such that a distance between the two end load transferring surfaces increases in the radial direction outwards, said inclined end load transferring surfaces being concave.

There is no teaching or suggestion, absent the applicants' own disclosure, for one having ordinary skill in the art at the time the invention was made to modify the a cable barrier system as disclosed by Watkins et al. (US 4,183,562) to have the above mentioned elemental features. Furthermore, such modifications would yield unexpected and unpredictable results.

Response to Arguments

Applicant's arguments filed 03 March 2011 have been fully considered but they are not persuasive.

With respect to the art rejection of claims 1 and 11, Applicant argues that the first end surface E and the second end surface E' identified by the Examiner are illustrated in Fig. 6 of Watkins (US 4,183,562) as straight lines, not as concave. Further, Applicant argues that Watkins et al. (US 4,183,562) does not disclose or suggest a first flanged end with a first end surface comprising a first load transferring surface, an entirety of the first load transferring surface

positioned and configured to face the second end surface, at least a portion of the said first load transferring surface at an unstressed condition being concave in a radial direction, such that the at least the portion of said first load transferring surface is curved and defined by a concave curve function. Furthermore, Applicant argues that Watkins et al. (US 4,183,562) does not disclose or suggest that any first and second points of the at least potion of the load transferring surface meet a plane inclined in the radial direction of the first flanged member as require by claims 1 and 11.

This is not persuasive. Claim 1 merely recites that the load transferring surface includes at least a portion that is concave in the unstressed condition. As currently presented this language reads on the concavity found in Watkins et al radially inwardly of the identified abutment point A. Applicant appears to be relying on the specification to impart to the claims limitations otherwise not recited therein. This reliance is insufficient.

With respect to Applicant's remarks concerning the first load transferring surface, it should be noted that the entire end surface constitutes this "surface". Nothing in the language of the claim precludes this interpretation or otherwise requires the unstressed concave portion to have to contact any other surface. Thus, in accordance with the language of the claim, there is a first load transferring surface (the entire end surface) and at least a portion of this surface (the radially innermost portion) is concave in the radial direction in an unstressed condition. Further, the entire load transferring surface is subject to deformation (doesn't say how much loading before deformation would occur nor does it specify what imparts/causes the deformation). Further still, it is readily ascertainable that the any first point (i.e., the radially innermost point of the concavity) and the any second point (i.e., the radially outermost point of the concavity) "meet a plane inclined in the radial direction" (i.e., drawn an imaginary line between the two points). There is also an outermost abutment point that will abut a second flanged member and it is located farthest in the radial direction from the central axis and an innermost abutment point (nothing in the claim requires the innermost abutment point to coincide with the proximal point) that is nearest to the central axis in the radial direction. While this interpretation may not be what is desired nor contemplated by Applicant, it remains that the language of the claim as instantly presented reads on the prior art and that is all that is necessary for anticipation to exist.

If this is not what is desired, then it is suggested that the claim language be appropriately amended to preclude such interpretation and more accurately define what was actually intended.

Further with respect to claim 1, it should be noted that recitations with respect to the manner in which a claimed apparatus is intended to be employed do not differentiate the claimed apparatus from a prior art apparatus if the prior art apparatus otherwise teaches all the structural limitations of the claim. Ex parte Masham, 2 USPQ2d 1647 (Bd. Pat. App. & Inter. 1987). Furthermore, while the features of an apparatus may be recited either structurally or functionally, claims are directed to an apparatus must be distinguished from the prior art in terms of structure rather than function. In re Schreiber, 128 F.3d 1473, 1477-78, 44 USPQ2d 1429, 1431-32 (Fed. Cir. 1997). Thus, how the single flanged member of claim 1 is intended to be used is of little consequence to the patentability determination of such single flanged member. In other words, any flanged member that reads on the structure defined by claim 1 is properly said to anticipate claim 1.

Applicant argues, with respect to the Section 103 rejection, that Buono discloses that the face 30 preferably tapers uniformly forward from the axis both radially inward and radially outward of the axis. Further, Applicant argues that Buono does not disclose or suggest an entirety of the first load transferring surface positioned and configured to face a second end surface, and at least the portion of said first load transferring surface, and that at least a portion of the first load transferring surface is concave in the radial direction, such that the at least a portion of the first load transferring surface is curved and defined by a concave curve function, as required by claim 1. This is not persuasive, because these points meet a plane that is inclined at a 90 degree angle. Nothing in the language of the claim precludes a 90 degree incline.

With respect to the concavity being curved, it is noted that Appellant's specification concludes with the expressed position that such shape is not critical and that many other variations of the shape of the concavity may be provided. It is also noted that Appellant discloses an embodiment wherein the concavity does not have a curvature, i.e., Fig. 1. Further, it appears that the only disclosed criticality pertains to the provision of a concavity, not the shape of the concavity. Accordingly, the Examiner's position, as advanced above, is still deemed to be appropriate.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nahid Amiri whose telephone number is (571) 272-8113. The examiner can normally be reached on Monday through Thursday from 8:00-6:30. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (571) 272-7087. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nahid Amiri
Examiner
Art Unit 3679
April 6, 2011

/Michael P. Ferguson/
Primary Examiner, Art Unit 3679